

- Translation -

Dop 2003/07 PCT

Applicant: Johann Doppstadt  
Vossnackerstrasse 67

**D 42555 Velbert**

---

**Trommel Screen Machine**

---

**Claims**

1. Trommel screen machine, comprising at least one revolving screening drum (2), at least one drive (3) for the screening drum, a feeding hopper (4), as well as at least one collecting device, respectively transport device (6), for collecting, respectively transporting, the screened good, **characterised in that** in front of and/or on the trommel screen machine (1) at least one disc screen (5) is arranged which screens defined grain, in particular oversize particles.
2. Trommel screen machine according to claim 1, **characterised in that** the disc screen (5) is arranged on the feeding hopper (4) of the trommel screen machine (1).
3. Trommel screen machine according to one or both of the preceding claims, **characterised in that** the disc screen (5) is designed in such a way that it can be folded, respectively turned, away.
4. Trommel screen machine according to one or more of the preceding claims, **characterised by** a common drive (3) for the screening drum (2) and the disc screen (5).
5. Trommel screen machine according to one or more of the preceding claims, **characterised in that** at least the drive (3) for the screening drum (2) is designed as direct drive, preferably by means of a pinion.
6. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the dimensions of the disc screen (5) is adapted to the size of the feeding hopper (4).
7. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the disc screen (5) is arranged at an

angle (alpha) which is inclined seen in transport direction (A) of the screening good in the screening drum (2) on the feeding hopper (4).

8. Trommel screen machine according to one or more of the preceding claims, **characterised in that** at least one adjusting device is provided by means of which the angle (alpha) of the disc screen (5) can be adjusted with regard to the feeding hopper (4).
9. Trommel screen machine according to one or more of the preceding claims, **characterised in that** a conveying device (6/3), for example a conveyor belt or a chute, is provided for transporting the defined oversized particles.
10. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the conveying device (6/3) has a multipart design, in particular in such a way that it can be angled or turned away.
11. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the conveying direction (B) of the conveying device (6/3) for the transported oversized particles is opposed to the transport direction (A) of the screening good.
12. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the conveying device (6/3) is arranged before the feeding hopper (4) with regard to the transport direction (A) of the screening good.
13. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the disc screen (5) is designed in such a way that it can be exchanged, respectively removed, such that at least stone grit, vibrating screen or the like can be arranged instead of the disc screen (5).
14. Trommel screen machine according to one or more of the preceding claims, **characterised in that** the stone grit, respectively the vibrating screen, is designed in such a way that it can also be folded, respectively turned away.
15. Disc screen in particular for a trommel screen machine according to one or more of the preceding claims, comprising at least two driven shafts (7) provided with discs (8), the discs (8) being arranged on the different shafts (7) staggered, respectively comb-like engaging to each other, **characterised in that** the shafts (7) are designed in an exchangeable way.

16. Disc screen according to claim 15, **characterised in that** the number, size and distance of the discs (8) to one another can be varied on the shafts (7).
17. Disc screen according to one or both of the preceding claims 15 and 16, **characterised in that** at least one of the discs (8) differs from the circular shape and is designed as a polygon.
18. Disc screen according to one or more of the preceding claims 15 to 17, **characterised in that** the discs (8) are designed in such a way that they can be exchanged, in particular be pinned up, respectively inserted, on the shaft (7).
19. Disc screen according to one or more of the preceding claims 15 to 18, **characterised in that** spacers (11) are provided which can be pinned up, respectively inserted, between the discs (8) on the shaft, and which are held on the shaft by means of a clamping device.
20. Disc screen according to one or more of the preceding claims 15 to 19, **characterised in that** at least one of the discs (8) has at least one nap (9).
21. Disc screen according to one or more of the preceding claims 15 to 20, **characterised in that** the nap (9) is attached to the perimeter of the discs (8).
22. Disc screen according to one or more of the preceding claims 15 to 21, **characterised in that** the discs (8) have, arranged on the perimeter, several borings (10) in each of which at least one nap (9) can be fixed in a releasable, fixed way.
23. Disc screen according to one or more of the preceding claims 15 to 22, **characterised in that** the number, size and shape of the naps (9) can vary, in particular that they are designed to be changeable, respectively exchangeable.
24. Disc screen according to one or more of the preceding claims 15 to 23, **characterised in that** naps (9) have a rectangular, square, circular, respectively oval, cross section.
25. Trommel screen machine with a disc screen (5) according to one or more of the preceding claims 15 to 24.
26. Recycling plant, respectively sorting plant, with at least one trommel screen machine (1) according to one or more of the claims 1 to 14 and 25, and/or at least one disc screen (5) according to one or more of the claims 15 to 24.